

RCLP LOAN # 4

APPLICATION FOR FINANCIAL ASSISTANCE  
Revised 4/99

IMPORTANT: Please consult the "Instructions for Completing the Project Application" for assistance in completion of this form.

SUBDIVISION: City of Wyoming CODE# 061-86730

DISTRICT NUMBER: 2 COUNTY: Hamilton DATE 09/07/08

CONTACT: Terry Huxel PHONE # (513) 821-3505

(THE PROJECT CONTACT PERSON SHOULD BE THE INDIVIDUAL WHO WILL BE AVAILABLE ON A DAY-TO-DAY BASIS DURING THE APPLICATION REVIEW AND SELECTION PROCESS AND WHO CAN BEST ANSWER OR COORDINATE THE RESPONSE TO QUESTIONS)

FAX (513) 821-7952 E-MAIL thuxel@wyoming.oh.us

PROJECT NAME: Chisholm Trail Improvements

SUBDIVISION TYPE

(Check Only 1)

- ☐ 1. County  
☒ 2. City  
☐ 3. Township  
☐ 4. Village  
☐ 5. Water/Sanitary District  
(Section 6119 O.R.C.)

FUNDING TYPE REQUESTED

(Check All Requested & Enter Amount)

- ☒ 1. Grant \$305,000.00 JDC  
☐ 2. Loan \$ 610,000 JDC  
☐ 3. Loan Assistance \$ \_\_\_\_\_

PROJECT TYPE

(Check Largest Component)

- ☒ 1. Road  
☐ 2. Bridge/Culvert  
☐ 3. Water Supply  
☐ 4. Wastewater  
☐ 5. Solid Waste  
☐ 6. Stormwater

TOTAL PROJECT COST: \$610,000.00

FUNDING REQUESTED: \$305,000.00 JDC

2008 SEP 19 PM 12:26  
OFFICE OF NEW BURLINGTON  
COUNTY ENGINEER

DISTRICT RECOMMENDATION  
To be completed by the District Committee ONLY

GRANT: \$ \_\_\_\_\_

SCIP LOAN: \$ \_\_\_\_\_

RLP LOAN: \$ 610,000

LOAN ASSISTANCE: \$ \_\_\_\_\_

RATE: \_\_\_\_\_ % TERM: \_\_\_\_\_ yrs.

RATE: 0% % TERM: 10 yrs. JDC

(Check Only 1)

- ☒ State Capital Improvement Program  
☐ Local Transportation Improvements Program

☐ Small Government Program

FOR OPWC USE ONLY

PROJECT NUMBER: C \_\_\_\_\_ /C \_\_\_\_\_

Local Participation \_\_\_\_\_ %

OPWC Participation \_\_\_\_\_ %

Project Release Date: \_\_\_\_/\_\_\_\_/\_\_\_\_

OPWC Approval: \_\_\_\_\_

APPROVED FUNDING: \$ \_\_\_\_\_

Loan Interest Rate: \_\_\_\_\_ %

Loan Term: \_\_\_\_\_ years

Maturity Date: \_\_\_\_\_

Date Approved: \_\_\_\_/\_\_\_\_/\_\_\_\_

SCIP Loan \_\_\_\_\_ RLP Loan \_\_\_\_\_

**1.0 PROJECT FINANCIAL INFORMATION**

**1.1 PROJECT ESTIMATED COSTS:**

(Round to Nearest Dollar)

**TOTAL DOLLARS**

**FORCE ACCOUNT  
DOLLARS**

**a.) Basic Engineering Services:**

\$ \_\_\_\_\_ .00

Preliminary Design \$ \_\_\_\_\_ .00

Final Design \$ \_\_\_\_\_ .00

Bidding \$ \_\_\_\_\_ .00

Construction Phase \$ \_\_\_\_\_ .00

Additional Engineering Services

\$ \_\_\_\_\_ .00

\*Identify services and costs below.

**b.) Acquisition Expenses:**

Land and/or Right-of-Way

\$ \_\_\_\_\_ .00

**c.) Construction Costs:**

\$ 610,000 .00

**d.) Equipment Purchased Directly:**

\$ \_\_\_\_\_ .00

**e.) Permits, Advertising, Legal:**

(Or Interest Costs for Loan Assistance  
Applications Only)

\$ \_\_\_\_\_ .00

**f.) Construction Contingencies:**

\$ \_\_\_\_\_ .00

**g.) TOTAL ESTIMATED COSTS:**

\$ 610,000 .00

\*List Additional Engineering Services here:  
Service:

Cost:

**1.2 PROJECT FINANCIAL RESOURCES:**

(Round to Nearest Dollar and Percent)

	DOLLARS	%
a.) Local In-Kind Contributions	\$ <u>                    </u> .00	
b.) Local Revenues	\$ <u>0</u> <del>305,000</del> .00	<del>50</del> 0 JDC
c.) Other Public Revenues	\$ <u>                    </u> .00	
ODOT	\$ <u>                    </u> .00	
Rural Development	\$ <u>                    </u> .00	
OEPA	\$ <u>                    </u> .00	
OWDA	\$ <u>                    </u> .00	
CDBG	\$ <u>                    </u> .00	
OTHER <u>                    </u>	\$ <u>                    </u> .00	
SUBTOTAL LOCAL RESOURCES:	\$ <u>0</u> <del>305,000</del> .00	<del>50</del> 0 JDC
d.) OPWC Funds		
1. Grant	\$ <u>305,000</u> .00	<del>50</del> JDC
2. Loan	\$ <u>610,000</u> .00	<u>100%</u> JDC
3. Loan Assistance	\$ <u>                    </u> .00	
SUBTOTAL OPWC RESOURCES:	\$ <u>610,000</u> <del>305,000</del> .00	<del>50</del> 100 JDC
e.) TOTAL FINANCIAL RESOURCES:	\$ <u>610,000</u> .00	<u>100%</u>

**1.3 AVAILABILITY OF LOCAL FUNDS:**

Attach a statement signed by the Chief Financial Officer listed in section 5.2 certifying all local share funds required for the project will be available on or before the earliest date listed in the Project Schedule section.

ODOT PID#                      Sale Date:

STATUS: (Check one)

Traditional

Local Planning Agency (LPA)

State Infrastructure Bank

## 2.0 PROJECT INFORMATION

If project is multi-jurisdictional, information must be consolidated in this section.

2.1 PROJECT NAME: Chisholm Trail Improvements

## 2.2 BRIEF PROJECT DESCRIPTION - (Sections A through C):

### A: SPECIFIC LOCATION:

The project is located at Chisholm Trail between Hilltop and Cody Pass in the City of Wyoming.

PROJECT ZIP CODE: 45215

### B: PROJECT COMPONENTS:

- 1.) Full depth pavement removal and replacement
- 2.) Curb removal and replacement
- 3.) Replace/Add new storm catch basins
- 4.) Upgrade existing storm sewer
- 5.) Seeding and Mulching as necessary
- 6.) Driveway apron replacement as necessary

### C: PHYSICAL DIMENSIONS / CHARACTERISTICS:

The length of the proposed project is approximately 1250 LF. The width of the existing roadway is approximately 25 feet.

### D: DESIGN SERVICE CAPACITY:

Detail current service capacity vs. proposed service level.

Road or Bridge: Current ADT 1400 Year: \_\_\_\_\_ Projected ADT: \_\_\_\_\_ Year:

Water/Wastewater: Based on monthly usage of 7,756 gallons per household, attach current rate ordinance. Current Residential Rate: \$\_\_\_\_\_ Proposed Rate: \$

Stormwater: Number of households served:

2.3 USEFUL LIFE / COST ESTIMATE: Project Useful Life: 30 Years.

Attach Registered Professional Engineer's statement, with original seal and signature confirming the project's useful life indicated above and estimated cost.



### 3.0 REPAIR/REPLACEMENT or NEW/EXPANSION:

TOTAL PORTION OF PROJECT REPAIR/REPLACEMENT \$ 610,000 .00

TOTAL PORTION OF PROJECT NEW/EXPANSION \$                      .00

### 4.0 PROJECT SCHEDULE: \*

	BEGIN DATE	END DATE
4.1 Engineering/Design:	<u>07 /15 /08</u>	<u>11 /30/09</u>
4.2 Bid Advertisement and Award:	<u>12/01/09</u>	<u>12/30/09</u>
4.3 Construction:	<u>02/01 /10</u>	<u>12/31/10</u>
4.4 Right-of-Way/Land Acquisition:	<u>N/A</u>	<u>N/A</u>

\* Failure to meet project schedule may result in termination of agreement for approved projects. Modification of dates must be requested in writing by the CEO of record and approved by the commission once the Project Agreement has been executed. The project schedule should be planned around receiving a Project Agreement on or about July 1st.

### 5.0 APPLICANT INFORMATION:

#### 5.1 CHIEF EXECUTIVE

OFFICER	Robert Harrison
TITLE	City Manager
STREET	800 Oak Avenue
CITY/ZIP	Wyoming, Ohio 45215
PHONE	513-821-7600
FAX	513-821-7952
E-MAIL	

#### 5.2 CHIEF FINANCIAL

OFFICER	Jenny Chavarria
TITLE	Director of Finance
STREET	800 Oak Avenue
CITY/ZIP	Wyoming, Ohio 45215
PHONE	513-821-7600
FAX	513-821-7952
E-MAIL	

#### 5.3 PROJECT MANAGER

TITLE	Terry Huxel
STREET	Director of Public Works
CITY/ZIP	800 Oak Avenue
PHONE	Wyoming, Ohio 45215
FAX	513-821-3505
E-MAIL	513-821-7952

**Changes in Project Officials must be submitted in writing from the CEO.**

## 6.0 ATTACHMENTS/COMPLETENESS REVIEW:

Confirm in the blocks [ ] below that each item listed is attached.

- ☒ [X] A certified copy of the legislation by the governing body of the applicant authorizing a designated official to sign and submit this application and execute contracts. This individual should sign under 7.0, Applicant Certification, below.
- ☒ [X] A certification signed by the applicant's chief financial officer stating all local share funds required for the project will be available on or before the dates listed in the Project Schedule section. If the application involves a request for loan (RLP or SCIP), a certification signed by the CFO which identifies a specific revenue source for repaying the loan also must be attached. Both certifications can be accomplished in the same letter.
- ☒ [X] A registered professional engineer's detailed cost estimate and useful life statement, as required in 164-1-13, 164-1-14, and 164-1-16 of the Ohio Administrative Code. Estimates shall contain an engineer's original seal or stamp and signature.
- ☐ [NA] A cooperation agreement (if the project involves more than one subdivision or district) which identifies the fiscal and administrative responsibilities of each participant.
- ☐ [NA] Projects which include new and expansion components and potentially affect productive farmland should include a statement evaluating the potential impact. If there is a potential impact, the Governor's Executive Order 98-VII and the OPWC Farmland Preservation Review Advisory apply.
- ☐ [ ] Capital Improvements Report: (Required by O.R.C. Chapter 164.06 on standard form)
- ☒ [X] Supporting Documentation: Materials such as additional project description, photographs, economic impact (temporary and/or full time jobs likely to be created as a result of the project), accident reports, impact on school zones, and other information to assist your district committee in ranking your project. Be sure to include supplements which may be required by your *local* District Public Works Integrating Committee.

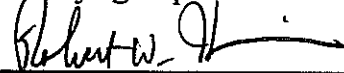
## 7.0 APPLICANT CERTIFICATION:

The undersigned certifies that: (1) he/she is legally authorized to request and accept financial assistance from the Ohio Public Works Commission; (2) to the best of his/her knowledge and belief, all representations that are part of this application are true and correct; (3) all official documents and commitments of the applicant that are part of this application have been duly authorized by the governing body of the applicant; and, (4) should the requested financial assistance be provided, that in the execution of this project, the applicant will comply with all assurances required by Ohio Law, including those involving Buy Ohio and prevailing wages.

Applicant certifies that physical construction on the project as defined in the application has NOT begun, and will not begin until a Project Agreement on this project has been executed with the Ohio Public Works Commission. Action to the contrary will result in termination of the agreement and withdrawal of Ohio Public Works Commission funding of the project.

Robert Harrison, City Manager

Certifying Representative



9/18/2008

Signature/Date Signed

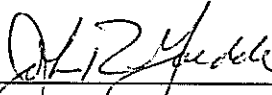
## Engineer's Estimate

### CHISHOLM TRAIL IMPROVEMENTS

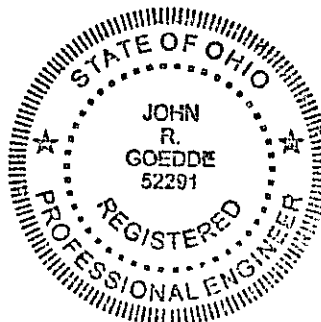
#### CITY OF WYOMING

DESCRIPTION	QUANTITY	UNIT	PRICE	COST
Tree Removed/Clearing	1	LS	\$ 20,000.00	\$ 20,000.00
Excavation/Pavement Removed	2500	CY	\$ 25.00	\$ 62,500.00
Driveway Apron (remove & replace)	350	SY	\$ 60.00	\$ 21,000.00
Curb Removed	2500	LF	\$ 5.00	\$ 12,500.00
Catch Basins/Manholes Removed	7	EA	\$ 500.00	\$ 3,500.00
Concrete Walk (remove & replace)	5000	SF	\$ 7.00	\$ 35,000.00
Pipe Removed	300	LF	\$ 10.00	\$ 3,000.00
Excavation, incl. Embankment (undercut)	900	CY	\$ 50.00	\$ 45,000.00
Aggregate Base	900	CY	\$ 45.00	\$ 40,500.00
Asphalt Concrete Base	320	CY	\$ 150.00	\$ 48,000.00
Asphalt Concrete Surface Course	150	CY	\$ 160.00	\$ 24,000.00
6" Underdrain	1000	LF	\$ 15.00	\$ 15,000.00
4"-8" Conduit (roof drains & collector)	800	LF	\$ 20.00	\$ 16,000.00
12"-15" Conduit	300	LF	\$ 100.00	\$ 30,000.00
18"-24" Conduit	100	LF	\$ 140.00	\$ 14,000.00
Catch Basin	7	EA	\$ 3,500.00	\$ 24,500.00
Manhole	4	EA	\$ 3,500.00	\$ 14,000.00
Concrete Curb & Gutter	2500	LF	\$ 14.00	\$ 35,000.00
Maintain Traffic	1	LS	\$ 15,000.00	\$ 15,000.00
Construction Layout Stakes	1	LS	\$ 20,000.00	\$ 20,000.00
Seed & Mulch Restoration incl. Topsoil	1750	SY	\$ 10.00	\$ 17,500.00
Utility Conflicts	1	LS	\$ 15,000.00	\$ 15,000.00
Contingencies	1	LS	\$ 79,000.00	\$ 79,000.00
<b>TOTAL ESTIMATED COST</b>				<b>\$ 610,000.00</b>

I hereby certify this to be an accurate estimate of the proposed project. The useful life of this project is 30 years.

  
 John R. Goedde, P.E.  
 JMA Consultants, Inc.

9-16-08  
 Date





CITY OF WYOMING • 800 OAK AVENUE • WYOMING, OHIO 45215  
(513) 821-7600  
FAX (513) 821-7952

December 10, 2008

Michael Miller  
Ohio Public Works Commission  
65 East State Street Suite 312  
Columbus, OH 43215

Re: Chisholm Trail Improvements

Dear Mr. Miller:

The City of Wyoming will make payments on this loan from the Capital Improvement Project Fund (Fund 440). If you have any questions, please contact me at 513-821-7600.

Sincerely,

Jenny Chavarria  
Finance Director

RESOLUTION NO. 24 -2008

**RESOLUTION AUTHORIZING THE CITY MANAGER TO MAKE  
APPLICATION FOR FISCAL YEAR 2009 STATE CAPITAL IMPROVEMENT  
PROGRAM FUNDS AND IF FUNDS ARE AWARDED TO EXECUTED GRANT  
AGREEMENTS ON BEHALF OF THE CITY**

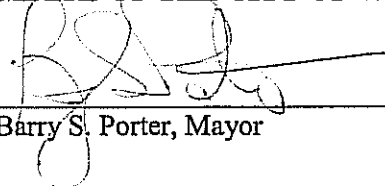
**WHEREAS**, the Council of the City of Wyoming has determined it would be in the best interest and to promote the general welfare of the community to apply for 2009 State Capital Improvement Program Funds and if funds are awarded to execute a grant agreement or agreements on behalf of the City.

**NOW, THEREFORE, BE IT RESOLVED BY THE COUNCIL OF THE  
CITY OF WYOMING, OHIO:**

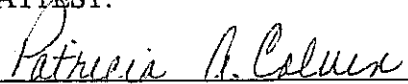
**Section 1.** That the City Manager is hereby authorized to make application(s) for State Capital Improvement Program (SCIP) funds for fiscal year 2009.

**Section 2.** That if funds are awarded, the City Manager is hereby authorized to execute a grant agreement or agreements on behalf of the City.

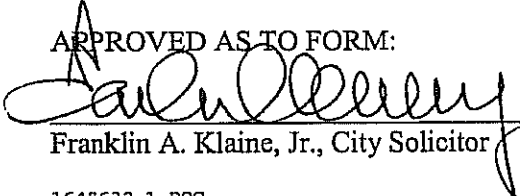
**PASSED IN THE COUNCIL CHAMBERS OF THE CITY OF WYOMING,  
OHIO, THIS 21st DAY JULY, 2008.**

  
Barry S. Porter, Mayor

ATTEST:

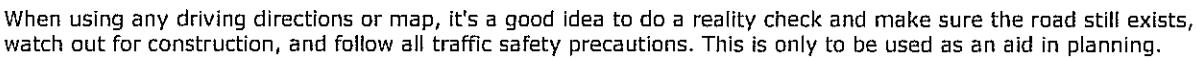
  
Patricia A. Colver  
Clerk of Council

APPROVED AS TO FORM:

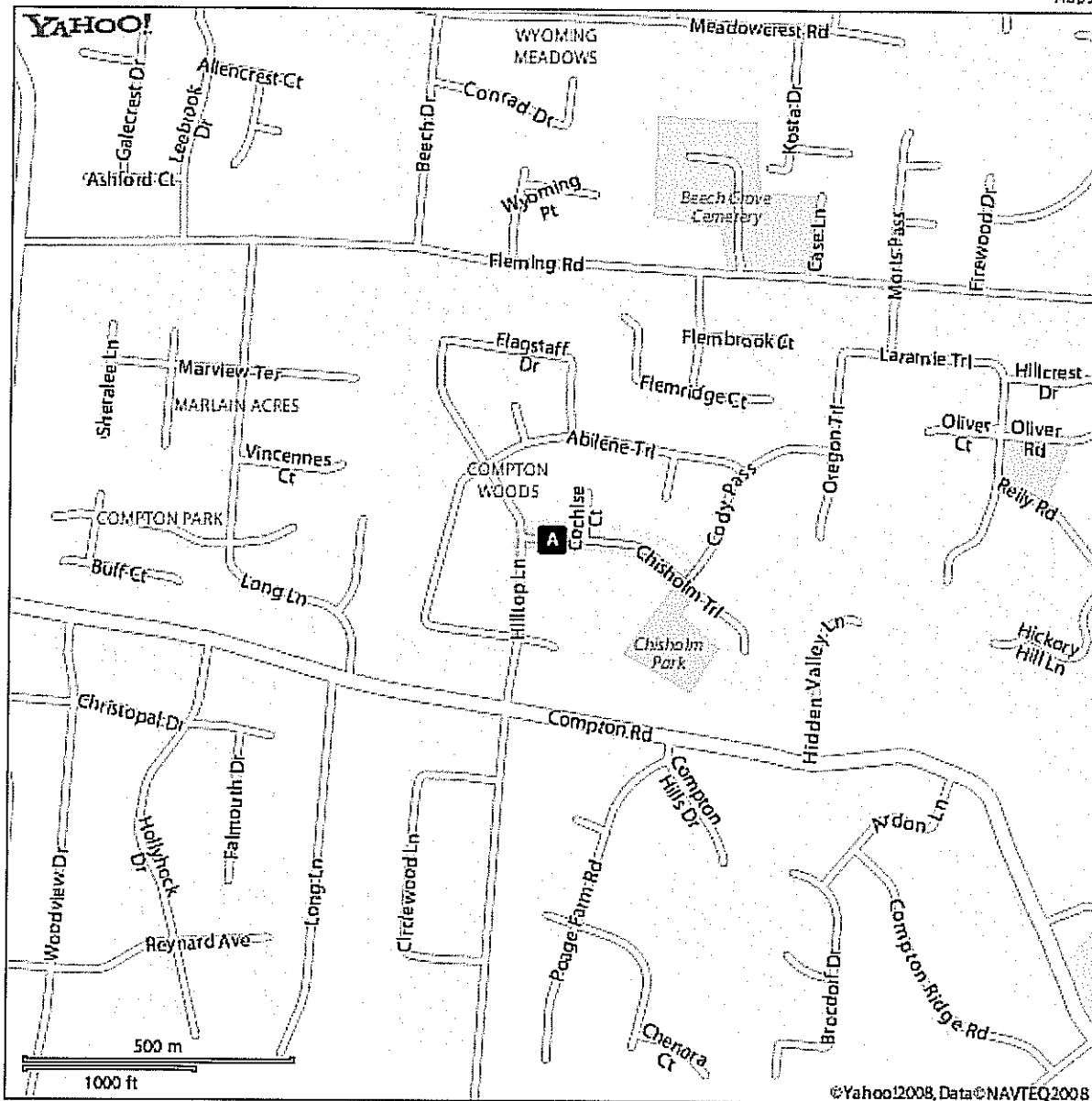
  
Franklin A. Klaine, Jr., City Solicitor

1648632\_1.DOC

**YAHOO! LOCAL**  
Maps



## Map of Chisholm Trl, Wyoming, OH 45215

YAHOO! LOCAL  
Maps

When using any driving directions or map, it's a good idea to do a reality check and make sure the road still exists, watch out for construction, and follow all traffic safety precautions. This is only to be used as an aid in planning.



**THELEN ASSOCIATES, INC.**

Geotechnical • Testing Engineers

○ 1398 Cox Avenue / Erlanger, Kentucky 41018-1002 / 859-746-9400 / Fax 859-746-9408  
✓ 2140 Waycross Road / Cincinnati, Ohio 45240-2719 / 513-825-4350 / Fax 513-825-4756  
[www.thelenassoc.com](http://www.thelenassoc.com)

© Copyright by Thelen Associates, Inc.  
February 28, 2008

**PAVEMENT CORES AND SUBGRADE  
EVALUATION  
CHISHOLM TRAIL  
WYOMING, OHIO**

**1.0 SCOPE**

The enclosed pavement and subgrade evaluation was performed along Chisholm Trail from its intersection with Hilltop Lane to its east terminus in Wyoming, Ohio. The purpose of this evaluation was to assess the condition of the existing pavement and subgrade soils, and to relate the engineering properties of the pavement constituents, that is existing pavement thickness and condition and subgrade strength, classifications and compressibility characteristics to the serviceability of Chisholm Trail.

**2.0 PROJECT CHARACTERISTICS**

It is our understanding that the City of Wyoming is considering improvement of the existing pavement along Chisholm Trail. Improvement may involve additional overlaying of the current section or the complete removal and replacement of the pavement.

**3.0 EXISTING SITE CONDITIONS**

The area being considered for improvement is Chisholm Trail as it extends east from its intersection with Hilltop Lane to its east end terminus. The roadway has an asphalt surface. Water, sanitary sewer, storm sewer and gas utilities are within and parallel the



street within the right-of-way. The condition of the existing pavement varies from fair to very poor at the surface. Portions of the street have been patched, and random cracking occurs throughout. Reflecting cracking due to the underlying concrete pavement is also evident along the entire length. The most distressed areas of the pavement surface occur along the curbing where the asphalt has begun disintegrating at the pavement edge. Some areas of the pavement appear to have been open cut in isolated areas for utility improvements or repairs, creating discontinuities within the pavement surface.

The asphalt pavement is bound on either side by rounded concrete curbing. Isolated areas of this curbing have been repaired or are in need of repair. The pavement is drained along the concrete curbing to storm sewer inlets typically located near street intersections but also located at intermediate locations between intersections.

The streets appear to have been overlaid several times, as evidenced by the shallow profile of the exposed concrete curbing, as the pavement cores indicate. The existing pavement surface appears to be beyond its service life specifically at locations along the curbing in which the asphalt overlay has begun to deteriorate.

#### **4.0 FIELD EXPLORATION**

Three (3) pavement cores and test borings were drilled at the locations marked in the field by Thelen Associates, Inc. near locations requested by JMA Consultants, Inc. The locations are referenced on each individual Log of Pavement Core and Test Boring by the nearest street address to their location.

The cores were performed with a 4-inch diameter diamond-tipped core barrel. The test borings were extended into the underlying subgrade soils with the advancement of a 3-inch diameter Shelby tube (ASTM D1587) hydraulically pushed with a truck-mounted drill rig. Two (2) 2-inch O.D. split spoon samples were then obtained according to the

procedures of ASTM D1586. The recovered cores and samples were marked in the field for proper identification. The split-spoon samples were placed in glass jars and capped and the Shelby tubes were capped and taped in their tubes to preserve the samples at their natural moisture contents.

Concurrent with the drilling operation, the Drilling Technician prepared field test boring logs of the pavement and subsurface profile noting pavement types and depths, sampling intervals, standard penetration test resistances (N-values), soil stratifications and groundwater levels or the lack thereof.

## **5.0 LABORATORY REVIEW**

Following completion of the test borings, the samples were returned to our Soil Mechanics Laboratory where they were reviewed and visually classified by the Project Engineer. Core samples of the asphalt pavement were visually reviewed and measured for length if they had not disintegrated during the coring process. Representative soil samples were selected for natural moisture content, unconfined compressive strength and Atterberg limits classification tests. A tabulation of the laboratory test results is included in the Appendix along with the associated test forms.

Based on the Drilling Technician's field logs, the results of the laboratory tests and the Engineer's visual classification of the samples, the final test boring logs were prepared. Copies of these logs are included in the Appendix along with a Soil Classification Sheet describing the terms and symbols used in their preparation. Unified Soil Classification System (USCS) and the Ohio Department of Transportation (ODOT) classifications, where determined by laboratory testing, are indicated on the test boring logs.

The dashed lines on the test boring logs identifying the changes between soil or bedrock types were determined by interpolation between the samples and should be considered to be approximate. Only changes which occur within samples can be

precisely determined and are indicated by solid lines on the logs. The transition between soil and/or bedrock types may be abrupt or gradual.

## **6.0 SUBSURFACE PROFILE**

The cores and test borings were located in areas which generally represent the current pavement conditions. The asphalt pavement ranged in thickness from 5 ¼ inches in Test Boring 1 to 6 inches in Test Borings 2 and 3. Three distinct asphalt courses were apparent within these asphalt pavement cores. The asphalt portion of these cores remained intact during the coring procedure. In Test Borings 2 and 3, Portland™ cement concrete was encountered beneath the asphalt pavement. The concrete pavement was noted as 8 inches thick in both cores. In Test Boring 2, the concrete core was noted as disintegrated for its entire depth. In Test Boring 3, the 8 inches of Portland™ cement concrete core was noted as intact for the top 1 inch of the core with the bottom 7 inches noted as heavily fractured to disintegrated.

Beneath the asphalt pavement in Test Boring 1, 3 ½ inches of wet, loose fine to coarse sand fill was encountered. The lack of concrete pavement in this test boring may be due to removal of the Portland™ cement concrete pavement for a utility repair.

Test Boring 3 encountered stiff fill consisting of silty clay beneath the pavement. This fill was encountered to a depth of 2.5 feet. The fill was found to have an Atterberg liquid limit of 40 percent and a plasticity index (liquid limit minus plastic limit) of 20 percent. This classifies the fill soil as a lean clay, CL (USCS) and A-6b (ODOT). The silty clay fill was found to have a natural dry density of 109.6 pounds per cubic foot (pcf) with an unconfined compressive strength of 2,610 pounds per square foot (psf). The natural moisture content of the fill was 20.7 percent.

All three test borings encountered native silty clay. These soils were encountered to as deep as 5.5 feet, the bottom of Test Boring 1. Native silty clay was found to have

Atterberg liquid limits of 48 and 45 percent with plasticity indices of 25 and 26 percent, respectively. This classifies the native silty clay as a lean clay, CL (USCS) and A-7-6 (ODOT). Natural moisture contents within the silty clay ranged between 21.9 percent and 27.0 percent with an average of 24.7 percent.

In Test Boring 3 at 4.9 feet, interbedded brown very soft highly weathered shale and gray hard limestone, bedrock, was encountered. The bedrock sample had a natural moisture content of 22.3 percent.

Water was encountered during drilling at 12 inches in Test Boring 3 but was noted by the Drilling Technician to be attributed to the core water used in obtaining the pavement core. At the completion of drilling, groundwater was not noted within any of the test borings. All test borings were immediately backfilled.

## **7.0 CONCLUSIONS AND RECOMMENDATIONS**

### **7.1 General**

Based upon our engineering reconnaissance of the site, the pavement cores and underlying soil borings, a visual examination of the samples, the laboratory tests, our understanding of the proposed remediation, and our experience as Consulting Soil and Construction Engineers in the Greater Cincinnati Area, we have reached the following conclusions and make the following recommendations.

The conclusions and recommendations of this report have been derived by relating the general principles of the discipline of Geotechnical Engineering to remediation or replacement of the existing pavement. Because changes in surface, subsurface, climatic and economic conditions can occur with time and location, we recommend for our mutual interest that the use of this report be restricted to this specific project.

We recommend that our office be retained to review the final design documents, plans and specifications, to assess any impact changes, additions or revisions in these documents may have on the conclusions and recommendations of this geotechnical report. Any changes or modifications which are made in the field during the construction phase which impact subgrade preparation, utility locations or other related site work should also be reviewed by our office prior to their implementation.

If conditions are encountered in the field during pavement remediation which vary from the facts of this report, we recommend that our office be contacted immediately to review the changed conditions in the field and make appropriate recommendations.

The scope of our services did not include any environmental assessment or investigation for the presence or absence of wetlands or hazardous or toxic materials in the soil, bedrock, surface water, groundwater or air, on or below or around this site.

We have performed the pavement cores, test borings and laboratory tests for our evaluation of the existing roadway conditions and for the formulation of the conclusions and recommendations of this report. We assume no responsibility for the interpretation or extrapolation of the data by others.

The subgrade preparation recommendations of this report presume that the earthwork will be monitored continuously by an Engineering Technician under the direction of a Registered Professional Geotechnical Engineer. We recommend that the Owner contract these services directly with Thelen Associates, Inc.

The existing pavement section consists of 5 ¼ inches to 6 inches of asphalt concrete underlain by 8 inches of Portland™ cement concrete in Test Borings 2 and 3. The asphalt concrete is heavily weathered, and the underlying Portland™ cement concrete is significantly fractured.

There are two major issues associated with the pavements along Chisholm Trail. The first issue is that the typical pavement section is underlain by concrete, which is disintegrating more with each freeze/thaw cycle. This weakening of the rigid pavement beneath the flexible surface course will result in continued reflective cracking within the asphalt overlays. This condition will accelerate with time and will result in a shortened service life.

The second issue is that the surface drainage and runoff is not completely being controlled and diverted to the storm sewer inlets. Water is filtering through the fractured pavement and ponding on the clayey subgrade. This water is not outletted by gravity with a granular base and has resulted in saturation and softening of the subgrade soils. This condition will become more pronounced once the rigid concrete pavement has fractured to the point that it is not dissipating the loads as originally designed, and will ultimately result in rutted pavement and depressions in areas where the subgrade soils have become weakened. All of the subgrade soils sampled are above their optimum moisture contents by 7 to 12 percent. Subgrade improvements will require aeration and/or limited undercuts to prepare a suitable soil subgrade for placing new pavements.

Because of the surface condition of the street discussed in the Existing Site Conditions, Section 3.0 of this report, the variability of the pavement, the permeability of the existing surface, as well as deterioration of the existing asphalt pavement, it is our opinion that proper reconditioning of the existing street will require the complete removal of the existing pavements, both asphalt and cement concrete, reconditioning and drying of the underlying soil subgrade and the replacement of the pavement section. In conjunction with the replacement, the subgrade should be crowned such that the surface drainage is directed off the asphalt roadway to curbing, and then along the curbing to storm sewer inlets.

Assuming that the streets will be replaced with a new pavement section, we provide the following recommendations.

## **7.2 Soil Subgrade Preparation**

Following the removal of the asphalt pavement surface, the fractured cement concrete pavement and any granular base materials, the exposed subgrades should be regraded as required to redirect the surface drainage. The subgrade should then be proofrolled with a piece of heavy equipment in the presence of the Project Geotechnical Engineer or a representative thereof. Any yielding areas noted during the proofroll should be undercut to expose stiff soils or as recommended by the Engineer.

The base of all shallow undercuts should be proofrolled. Should additional yielding be noted, the Engineer should be consulted to assess whether further undercutting or additional measures should be implemented. An accepted proofrolled surface should then be compacted in place to a minimum dry density of 95 percent of the maximum dry density as determined by the standard Proctor moisture-density test, ASTM D698.

In some instances, we have found that shallow utilities prevent or limit undercut depths. Areas which fail a proofroll may have to be improved using additional granular soils and the integration of geogrids, or by the complete redesign of pavement sections. We recommend that, if shallow utilities exist in the areas of poor subgrade, the Design Engineer and/or the Geotechnical Engineer be consulted.

New fill for restoration of subgrades should consist of approved soil from the undercuts or approved borrow with a liquid limit less than 60 percent and a plasticity index less than 35 percent. This fill should be placed in shallow, level layers, 6 to 8 inches in thickness, and should be compacted with appropriate equipment, such as a sheepsfoot roller or self-propelled compactor for clayey soils. If granular fill is used, it should be permanently drained and compacted with vibratory equipment.

All fill should be placed at a moisture content between 2 percent below and 3 percent above the optimum moisture content, ASTM D698. The laboratory tests indicate that the natural moisture contents of the subgrade materials are above the optimum moisture for

compaction or slightly above, such that significant moisture conditioning may be necessary during construction, depending on the season of the year, the construction procedures implemented and weather conditions.

Immediately prior to placing the pavement section, including the placement of any granular base course, the soil subgrade should be proofrolled and any yielding areas should be undercut and replaced with compacted fill as outlined above. The subgrade surface should then be manipulated as needed to bring the moisture content to within 2 percent of the optimum moisture content. The prepared subgrade should then be compacted in place to at least 100 percent, ASTM D698.

The criteria presented above for subgrade remediation are, in our opinion, the minimum acceptable levels for satisfactory performance of the project. Local regulations may necessitate specifications which are more stringent than those presented in this report.

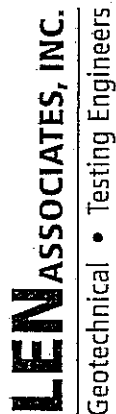
### **7.3 Pavement Design**

We recommend that the pavements for the project be designed in accordance with the anticipated axle loads, frequency of loading and the properties of the subgrade soils. The subgrade properties for use in formal pavement designs should be determined from field California Bearing Ratio (CBR) or plate load tests or from a correlation between field density tests and laboratory CBR tests. In lieu of these formal test, the Design Engineer for the pavement may elect or assume a CBR value based on index properties for the soils, applying laboratory testing data provided herein. It should be noted that the materials encountered at subgrade are generally silty clay soils which are relatively weak and typically have relatively low CBR values. Any assumed CBR value should be confirmed by field or laboratory testing prior to pavement replacement.



If a granular base is to be reincorporated beneath the pavement, we recommend that the base be permanently drained to discharge at the edge of the pavement or via underdrains into the storm sewer system.

KDW:ATS:ph  
080104NE



Geotechnical • Testing Engineers

○ 1398 Cox Avenue / Erlanger, Kentucky 41018-1002 / 859-746-9400 / Fax 859-746-9408  
 ● 2140 Waycross Road / Cincinnati, Ohio 45240-2719 / 513-825-4350 / Fax 513-825-4756

CITY OF WYOMING  
PAVEMENT CORES AND SUBGRADE EVALUATION  
CHISHOLM TRAIL  
WYOMING, OHIO  
080104NE

## **TABULATION OF LABORATORY TESTS**

[illegible]



# THELEN ASSOCIATES, INC.

Geotechnical • Testing Engineers

○ 1398 Cox Avenue / Erlanger, Kentucky 41018-1002 / 859-746-9400 / Fax 859-746-9408  
 ✓ 2140 Waycross Road / Cincinnati, Ohio 45240-2719 / 513-825-4350 / Fax 513-825-4756  
 www.thelenassoc.com

## LOG PAVEMENT CORE AND TEST BORING

CLIENT: City of Wyoming

PROJECT: Pavement Cores, Chisholm Trail, Wyoming, Ohio

BORING # 1

LOCATION OF BORING: In front of 450 Chisholm Trail

JOB # 080104NE

ELEV.	SOIL DESCRIPTION COLOR, MOISTURE, DENSITY, PLASTICITY, SIZE, PROPORTIONS	STRATA DEPTH (ft.)	DEPTH SCALE (ft.)	SAMPLE			
				Cond	Blows/6"	No.	Type Rec. (in.)
100.0		0.0					
99.5	ASPHALT (5½", 3 apparent courses)					1	PC 5 ½
99.2	Brown wet loose FILL, silty fine to coarse sand, little fine gravel (3.5")	0.5 0.8					
			1	U		2	PT 14 ¼ 24"
			2				
			3	I	3/3/5	3	DS 18
			4				
			5	I	4/8/8	4	DS 18
94.5	Mottled brown, trace gray moist stiff to very stiff SILTY CLAY, trace fine to coarse sand with iron oxide stains and limestone fragments. (CL/A-7-6)	5.5					
	Bottom of test boring at 5.5 feet.		6				
			7				
			8				
			9				
			10				

Datum Relative Hammer Wt. 140 lb Hole Diameter 5 in. Foreman BR  
 Surf. Elev. 100.0 Hammer Drop 30 in. Rock Core Dia.  Engineer KDW  
 Date Started 2-14-08 Pipe Size 2 in. O.D. Boring Method CFA Date Completed 2-14-08

### SAMPLE CONDITIONS

D - DISINTEGRATED  
 I - INTACT  
 U - UNDISTURBED  
 L - LOST

### SAMPLE TYPE

DS - DRIVEN SPLIT SPOON  
 PT - PRESSED SHELBY TUBE  
 CA - CONTINUOUS FLIGHT AUGER  
 PC - PAVEMENT CORE

### GROUND WATER DEPTH

FIRST NOTED None ft.  
 AT COMPLETION Dry ft.  
 AFTER  hrs.  ft.  
 BACKFILLED Immed. hrs.

### BORING METHOD

HSA - HOLLOW STEM AUGERS  
 CFA - CONTINUOUS FLIGHT AUGERS  
 DC - DRIVING CASING  
 MD - MUD DRILLING

\* STANDARD PENETRATION TEST - DRIVING 2" O.D. SAMPLER 1' WITH 140# HAMMER FALLING 30"; COUNT MADE AT 6" INTERVALS



# THELEN ASSOCIATES, INC.

Geotechnical • Testing Engineers

○ 1398 Cox Avenue / Erlanger, Kentucky 41018-1002 / 859-746-9400 / Fax 859-746-9408  
 ✓ 2140 Waycross Road / Cincinnati, Ohio 45240-2719 / 513-825-4350 / Fax 513-825-4756  
 www.thelenassoc.com

## LOG PAVEMENT CORE AND TEST BORING

CLIENT: City of Wyoming

BORING # 2

PROJECT: Pavement Cores, Chisholm Trail, Wyoming, Ohio

JOB # 080104NE

LOCATION OF BORING: In front of 519 Chisholm Trail

ELEV.	SOIL DESCRIPTION COLOR, MOISTURE, DENSITY, PLASTICITY, SIZE, PROPORTIONS	STRATA DEPTH (ft.)	DEPTH SCALE (ft.)	SAMPLE			
				Cond	Blows/6"	No.	Type Rec. (in.)
100.0		0.0					
99.5	ASPHALT (6", 3 apparent courses)					1	PC 6
98.9	PORTLAND CEMENT CONCRETE (8", disintegrated)	0.5					
		1.1	1	I	3/3/5	2	DS 18
			2				
			3	I	4/8/8	3	DS 18
96.1	Brown, trace gray moist stiff SILTY CLAY, trace fine to coarse sand with iron oxide stains. (CL/A-7-6)	3.9	4				
	Bottom of test boring at 3.9 feet.		5				
			6				
			7				
			8				
			9				
			10				

Datum Relative Hammer Wt. 140 lb Hole Diameter 5 in. Foreman BR  
 Surf. Elev. 100.0 Hammer Drop 30 in. Rock Core Dia.  Engineer KDW  
 Date Started 2-14-08 Pipe Size 2 in. O.D. Boring Method CFA Date Completed 2-14-08

### SAMPLE CONDITIONS

D - DISINTEGRATED  
 I - INTACT  
 U - UNDISTURBED  
 L - LOST

### SAMPLE TYPE

DS - DRIVEN SPLIT SPOON  
 PT - PRESSED SHELBY TUBE  
 CA - CONTINUOUS FLIGHT AUGER  
 PC - PAVEMENT CORE

### GROUND WATER DEPTH

FIRST NOTED None ft.  
 AT COMPLETION Dry ft.  
 AFTER hrs. ft.  
 BACKFILLED Immed. hrs.

### BORING METHOD

HSA - HOLLOW STEM AUGERS  
 CFA - CONTINUOUS FLIGHT AUGERS  
 DC - DRIVING CASING  
 MD - MUD DRILLING

\* STANDARD PENETRATION TEST - DRIVING 2" O.D. SAMPLER 1' WITH 140# HAMMER FALLING 30"; COUNT MADE AT 6" INTERVALS



# THELEN ASSOCIATES, INC.

Geotechnical • Testing Engineers

1398 Cox Avenue / Erlanger, Kentucky 41018-1002 / 859-746-9400 / Fax 859-746-9408

2140 Waycross Road / Cincinnati, Ohio 45240-2719 / 513-825-4350 / Fax 513-825-4756

www.thelenassoc.com

## LOG PAVEMENT CORE AND TEST BORING

CLIENT: City of Wyoming

BORING # 3

PROJECT: Pavement Cores, Chisholm Trail, Wyoming, Ohio

JOB # 080104NE

LOCATION OF BORING: In front of 549 Chisholm Trail

ELEV.	SOIL DESCRIPTION COLOR, MOISTURE, DENSITY, PLASTICITY, SIZE, PROPORTIONS	STRATA DEPTH (ft.)	DEPTH SCALE (ft.)	SAMPLE				
				Cond	Blows/6"	No.	Type	Rec. (in.)
100.0		0.0						
99.5	ASPHALT (6", 3 apparent courses)					1	PC	6
98.9	PORTLAND CEMENT CONCRETE (6", top 1" intact, bottom 7" heavily fractured to disintegrated).	0.5 1.1	1					
97.5	Brown, trace gray moist stiff FILL, silty clay, trace fine to coarse sand, shale and limestone fragments. (CL/A-6b)	2.5	2	U		2	DS	10 24
95.1	Brown, trace gray very moist medium stiff SILTY CLAY, trace shale and limestone fragments with iron oxide stains.	4.9	4	I	2/2/6	3	DS	6
94.1	Interbedded brown moist very soft highly weathered SHALE and gray hard LIMESTONE (bedrock).	5.9	5	I	13/11/27	4	DS	12
	Bottom of test boring at 5.9 feet.		6					
			7					
			8					
			9					
			10					

Datum Relative Hammer Wt. 140 lb Hole Diameter 5 in. Foreman BR  
 Surf. Elev. 100.0 Hammer Drop 30 in. Rock Core Dia.  Engineer KDW  
 Date Started 2-14-08 Pipe Size 2 in. O.D. Boring Method CFA Date Completed 2-14-08

### SAMPLE CONDITIONS

### SAMPLE TYPE

### GROUND WATER DEPTH

### BORING METHOD

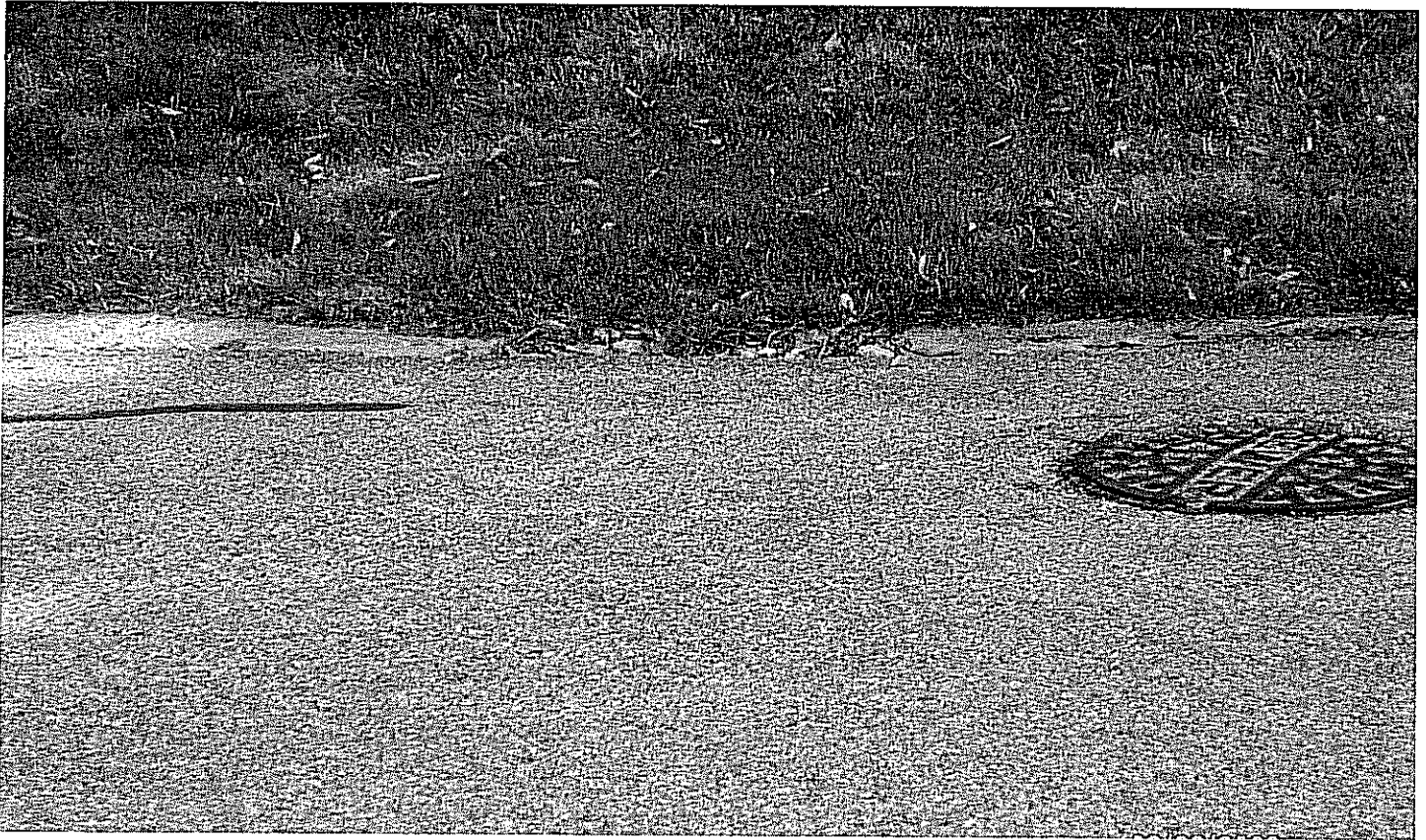
D - DISINTEGRATED  
 I - INTACT  
 U - UNDISTURBED  
 L - LOST

DS - DRIVEN SPLIT SPOON  
 PT - PRESSED SHELBY TUBE  
 CA - CONTINUOUS FLIGHT AUGER  
 PC - PAVEMENT CORE

FIRST NOTED 12" Core Water ft.  
 AT COMPLETION Dry ft.  
 AFTER  hrs.  ft.  
 BACKFILLED Immed. hrs.

HSA - HOLLOW STEM AUGERS  
 CFA - CONTINUOUS FLIGHT AUGERS  
 DC - DRIVING CASING  
 MD - MUD DRILLING

\* STANDARD PENETRATION TEST - DRIVING 2" O.D. SAMPLER 1' WITH 140# HAMMER FALLING 30"; COUNT MADE AT 6" INTERVALS



Chisholm Trail  
City of Wyoming



Chisholm Trail  
City of Wyoming





Chisholm Trail  
City of Wyoming



Chisholm Trail  
City of Wyoming



Chisholm Trail  
City of Wyoming



Chisholm Trail  
City of Wyoming





Chisholm Trail  
City of Wyoming



Chisholm Trail  
City of Wyoming



Chisholm Trail  
City of Wyoming



Chisholm Trail  
City of Wyoming





Chisholm Trail  
City of Wyoming



Chisholm Trail  
City of Wyoming



Chisholm Trail  
City of Wyoming



Chisholm Trail  
City of Wyoming





Chisholm Trail  
City of Wyoming



Chisholm Trail  
City of Wyoming



Chisholm Trail  
City of Wyoming



Chisholm Trail  
City of Wyoming





Chisholm Trail  
City of Wyoming



Chisholm Trail  
City of Wyoming



Chisholm Trail  
City of Wyoming



Chisholm Trail  
City of Wyoming





Chisholm Trail  
City of Wyoming



Chisholm Trail  
City of Wyoming





Chisholm Trail  
City of Wyoming



Chisholm Trail  
City of Wyoming

## ADDITIONAL SUPPORT INFORMATION

For Program Year 2009 (July 1, 2009 through June 30, 2010), jurisdictions shall provide the following support information to help determine which projects will be funded. Information on this form must be accurate, and where called for, based on sound engineering principles. Documentation to substantiate the individual items, as noted, is required. The applicant should also use the rating system and its' addendum as a guide. The examples listed in this addendum are not a complete list, but only a small sampling of situations that may be relevant to a given project.

**IF YOU ARE APPLYING FOR A GRANT, WILL YOU BE WILLING TO ACCEPT A LOAN IF ASKED BY THE DISTRICT?  X  YES        NO    (ANSWER REQUIRED)**

**Note: Answering "Yes" will not increase your score and answering "NO" will not decrease your score.**

**1) What is the physical condition of the existing infrastructure that is to be replaced or repaired?**

Give a statement of the nature of the deficient conditions of the present facility exclusive of capacity, serviceability, health and/or safety issues. If known, give the approximate age of the infrastructure to be replaced, repaired, or expanded. Use documentation (if possible) to support your statement. Documentation may include (but is not limited to): ODOT BR86 reports, pavement management condition reports, televised underground system reports, age inventory reports, maintenance records, etc., and will only be considered if included in the original application. Examples of deficiencies include: structural condition; substandard design elements such as widths, grades, curves, sight distances, drainage structures, etc.

The pavement surface is deteriorating and is in poor condition. Random cracking occurs throughout in addition to reflective cracking due to the underlying concrete pavement. A pavement and subgrade evaluation was prepared for the City of Wyoming by Thelen Associates, a certified testing firm. The engineering evaluation of the pavement and subgrade was requested after several pavement failures were exhibited in the roadway. There was concern by the City that the existing concrete pavement could be acting as a "bridge" and not exhibit base failures similar to asphalt pavement. The City wanted to document the condition of the existing pavement especially the underlying concrete pavement which is not as readily discerned by visual. Applicable portions of the report are attached for documentation and reference. The City requested three borings (spaced at approximately 600 foot intervals) to obtain a true evaluation of the overall roadway condition. The report indicates the surface to be deteriorated and heavily weathered. The underlying concrete pavement is significantly fractured. The report further indicates the concrete pavement will continue disintegrating, accelerating with each freeze-thaw cycle. Overland stormwater flows are filtering through the fractured pavement and ponding on the clayey subgrade resulting in saturation and softening of the subgrade (ref. report p. 7). All sampled subgrade soils were above optimum moisture. The professional engineering report prepared for the City recommends removal of the pavement section and reconditioning of the subgrade. The project will remove the existing asphalt and concrete pavement. Soft subgrade will be reconditioned and/or removed and replaced as necessary.

A granular base will be constructed in conjunction with underdrains that will be connected to a storm sewer system. This will allow proper control of subgrade drainage. The deteriorated curb which contributes to uncontrolled surface runoff and the resultant filtering to the subgrade, will be replaced with the project. The new curb will better control the runoff directing flow to the catch basins (also being replaced with the project).

- 2) How important is the project to the safety of the Public and the citizens of the District and/or service area?

Give a statement of the projects effect on the safety of the service area. The design of the project is intended to reduce existing accident rate, promote safer conditions, and reduce the danger of risk, liability or injury. (Typical examples may include the effects of the completed project on accident rates, emergency response time, fire protection, and highway capacity.) Please be specific and provide documentation if necessary to substantiate the data. The applicant must demonstrate the type of problems that exist, the frequency and severity of the problems and the method of correction.

An existing catch basin is located in the curb ramp at the Cody Pass intersection (see attached pictures). The catch basin was installed to collect overland flows that currently pond in the ramp. This catch basin will be removed with the project. The project will correct the substandard gradients that cause this problem allowing the installation of a new catch basin in the roadway.

- 3) How important is the project to the health of the Public and the citizens of the District and/or service area?

Give a statement of the projects effect on the health of the service area. The design of the project will improve the overall condition of the facility so as to reduce or eliminate potential for disease, or correct concerns regarding the environmental health of the area. (Typical examples may include the effects of the completed project by improving or adding storm drainage or sanitary facilities, etc.). Please be specific and provide documentation if necessary to substantiate the data. The applicant must demonstrate the type of problems that exist, the frequency and severity of the problems and the method of correction.

N/A

- 4) Does the project help meet the infrastructure repair and replacement needs of the applying jurisdiction?

The applying agency must submit a listing in priority order of the projects for which it is applying. Points will be awarded on the basis of most to least importance.

Priority 1 Congress Run Improvements

Priority 2 Chisholm Trail Improvements

Priority 3 Brooks Ave. & Jewett Drive Improvements

Priority 4 \_\_\_\_\_

Priority 5 \_\_\_\_\_

- 5) To what extent will the user fee funded agency be participating in the funding of the project?

(example: rates for water or sewer, frontage assessments, etc.)

No participation – Zero (0)%

**6) Economic Growth – How will the completed project enhance economic growth**

Give a statement of the projects effect on economic growth (be specific).

No significant impact on economic growth

---

---

**7) Matching Funds - LOCAL**

The information regarding local matching funds is to be filed by the applicant in Section 1.2 (b) of the Ohio Public Works Association's "Application For Financial Assistance" form.

**8) Matching Funds - OTHER**

The information regarding local matching funds is to be filed by the applicant in Section 1.2 (c) of the Ohio Public Works Association's "Application For Financial Assistance" form. If MRF funds are being used for matching funds, the MRF application must have been filed by Friday, August 29, 2008 for this project with the Hamilton County Engineer's Office. List below all "other" funding the source(s).

Local funds are used as the match for this project

---

---

**9) Will the project alleviate serious traffic problems or hazards or respond to the future level of service needs of the district?**

Describe how the proposed project will alleviate serious traffic problems or hazards (be specific).

---

---

Level of Service (LOS) calculations shall be for the improvements being made in the application. If this project is a phase of a larger project then any preceding phases shall be considered conditions for LOS calculations. Any future project phases shall not be considered as part of this applications LOS calculations.

For roadway betterment projects, provide the existing and proposed Level of Service (LOS) of the facility using the methodology outlined within AASHTO'S "Geometric Design of Highways and Streets" and the 1985 Highway Capacity Manual.

No Build

Proposed Geometry

Current Year LOS \_\_\_\_\_

Current Year LOS \_\_\_\_\_

Design Year LOS \_\_\_\_\_

Design Year LOS \_\_\_\_\_

If the proposed design year LOS is not "C" or better, explain why LOS "C" cannot be achieved.

---

---

**10) If SCIP/LTIP funds were granted, when would the construction contract be awarded?**

If SCIP/LTIP funds are awarded, how soon after receiving the Project Agreement from OPWC (tentatively set for July 1 of the year following the deadline for applications) would the project be under contract? The Support Staff will review status reports of previous projects to help judge the accuracy of a jurisdiction's anticipated project schedule.

Number of months 4

- a.) Are preliminary plans or engineering completed? Yes X No \_\_\_\_\_ N/A \_\_\_\_\_
- b.) Are detailed construction plans completed? Yes \_\_\_\_\_ No X N/A \_\_\_\_\_
- c.) Are all utility coordination's completed? Yes \_\_\_\_\_ No X N/A \_\_\_\_\_
- d.) Are all right-of-way and easements acquired (if applicable)? Yes \_\_\_\_\_ No \_\_\_\_\_ N/A X

If no, how many parcels needed for project? \_\_\_\_\_ Of these, how many are: Takes \_\_\_\_\_

Temporary \_\_\_\_\_

Permanent \_\_\_\_\_

For any parcels not yet acquired, explain the status of the ROW acquisition process for this project.

- e.) Give an estimate of time needed to complete any item above not yet completed. 8 Months.

**11) Does the infrastructure have regional impact?**

Give a brief statement concerning the regional significance of the infrastructure to be replaced, repaired, or expanded.

The project will primarily affect the businesses and the residents of the City of Wyoming.

**12) What is the overall economic health of the jurisdiction?**

The District 2 Integrating Committee predetermines the jurisdiction's economic health. The economic health of a jurisdiction may periodically be adjusted when census and other budgetary data are updated.

**13) Has any formal action by a federal, state, or local government agency resulted in a partial or complete ban of the usage or expansion of the usage for the involved infrastructure?**

Describe what formal action has been taken which resulted in a ban of the use of or expansion of use for the involved infrastructure? Typical examples include weight limits, truck restrictions, and moratoriums or limitations on issuance of building permits, etc. The ban must have been caused by a structural or operational problem to be considered valid. Submission of a copy of the approved legislation would be helpful.

No ban

Will the ban be removed after the project is completed? Yes \_\_\_\_\_ No \_\_\_\_\_ N/A X

**14) What is the total number of existing daily users that will benefit as a result of the proposed project?**

For roads and bridges, multiply current Average Daily Traffic (ADT) by 1.20. For inclusion of public transit, submit documentation substantiating the count. Where the facility currently has any restrictions or is partially closed, use documented traffic counts prior to the restriction. For storm sewers, sanitary sewers, water lines, and other related facilities, multiply the number of households in the service area by 4. User information must be documented and certified by a professional engineer or the jurisdictions' C.E.O.

Traffic: ADT 1400 X 1.20 = 1680 Users

Water/Sewer: Homes \_\_\_\_\_ X 4.00 = \_\_\_\_\_ Users

**15) Has the jurisdiction enacted the optional \$5 license plate fee, an infrastructure levy, a user fee, or dedicated tax for the pertinent infrastructure?**

The applying jurisdiction shall list what type of fees, levies or taxes they have dedicated toward the type of infrastructure being applied for. (Check all that apply)

Optional \$5.00 License Tax yes

Infrastructure Levy \_\_\_\_\_ Specify type \_\_\_\_\_

Facility Users Fee \_\_\_\_\_ Specify type \_\_\_\_\_

Dedicated Tax \_\_\_\_\_ Specify type \_\_\_\_\_

Other Fee, Levy or Tax yes Specify type Bond for roadway improvements

**SCIP/LTIP PROGRAM  
ROUND 23 - PROGRAM YEAR 2009  
PROJECT SELECTION CRITERIA  
JULY 1, 2009 TO JUNE 30, 2010**

NAME OF APPLICANT: WYOMING  
NAME OF PROJECT: GRISHAM TRAIL  
RATING TEAM: 2

**General Statement for Rating Criteria**

Points awarded for all items will be based on engineering experience, field verification, application information and other information supplied by the applying agency, which is deemed to be relevant by the Support Staff. The examples listed in this addendum are not a complete list, but only a small sampling of situations that may be relevant to a given project.

**CIRCLE THE APPROPRIATE RATING**

1) What is the physical condition of the existing infrastructure that is to be replaced or repaired?

- 25 - Failed  
23 - Critical  
20 - Very Poor  
17 - Poor  
15 - Moderately Poor  
10 - Moderately Fair  
5 - Fair Condition  
0 - Good or Better

*MODERATE F. D.*

Appeal Score

\_\_\_\_\_

**Criterion 1 - Condition**

Condition of the particular infrastructure to be repaired, reconstructed or replaced shall be a measure of the degree of reduction in condition from its original state. Historic pavement management data based on ASTM D6433-99 rating system may be submitted as documentation. Capacity, serviceability, safety and health shall not be considered in this criterion. Any documentation the Applicant wishes to be considered must be included in the application package.

**Definitions:**

**Failed Condition** - requires complete reconstruction where no part of the existing facility is salvageable. (E.g. Roads: complete reconstruction of roadway, curbs and base; Bridges: complete removal and replacement of bridge; Underground: removal and replacement of an underground drainage or water system.

**Critical Condition** - requires partial reconstruction to maintain integrity. (E.g. Roads: reconstruction of roadway/curbs can be saved; Bridges: removal and replacement of bridge with abutment modification; Underground: removal and replacement of part of an underground drainage or water system.

**Very Poor Condition** - requires extensive rehabilitation to maintain integrity. (E.g. Roads: extensive full depth, partial depth and curb repair of a roadway with a structural overlay; Bridges: superstructure replacement; Underground: repair of joints and/or replacement of pipe sections.

**Poor Condition** - requires standard rehabilitation to maintain integrity. (E.g. Roads: moderate full depth, partial depth and curb repair to a roadway with no structural overlay needed or structural overlay with minor repairs to a roadway needed; Bridges: extensive patching of substructure and replacement of deck; Underground: insituform or other in ground repairs.

**Moderately Poor Condition** - requires minor rehabilitation to maintain integrity. (E.g. Roads: minor full depth, partial depth or curb repairs to a roadway with either a thin overlay or no overlay needed; Bridges: major structural patching and/or major deck repair.

**Moderately Fair Condition** - requires extensive maintenance to maintain integrity. (E.g. Roads: thin or no overlay with extensive crack sealing, minor partial depth and/or slurry or rejuvenation; Bridges: minor structural patching, deck repair, erosion control.)

**Fair Condition** - requires routine maintenance to maintain integrity. (E.g. Roads: slurry seal, rejuvenation or routine crack sealing to the roadway; Bridges: minor structural patching.)

**Good or Better Condition** - little to no maintenance required to maintain integrity.

**Note:** If the infrastructure is in "good" or better condition, it will **NOT** be considered for SCIP/LTIP funding unless it is an expansion project that will improve serviceability.



2) How important is the project to the safety of the Public and the citizens of the District and/or service area?

- 25 - Highly significant importance
- 20 - Considerably significant importance
- 15 - Moderate importance
- 10 - Minimal importance
- 5 - Poorly documented importance
- 0 - No measurable impact

Appeal Score

\_\_\_\_\_

**Criterion 2 – Safety**

The applying agency shall include in its application the type of deficiency that currently exists and how the intended project would improve the situation. For example, have there been vehicular accidents attributable to the problems cited? Have they involved injuries or fatalities? In the case of water systems, are existing hydrants non-functional? In the case of water lines, is the present capacity inadequate to provide volumes or pressure for adequate fire protection? **In all cases, specific documentation is required.** Mentioned problems, which are poorly documented, generally will not receive more than 5 points.

**Note:** Each project is looked at on an individual basis to determine if any aspects of this category apply. **Examples given above are NOT intended to be exclusive.**

3) How important is the project to the health of the Public and the citizens of the District and/or service area?

- 25 - Highly significant importance
- 20 - Considerably significant importance
- 15 - Moderate importance
- 10 - Minimal importance
- 5 - Poorly documented importance
- 0 - No measurable impact

Appeal Score

\_\_\_\_\_

**Criterion 3 – Health**

The applying agency shall include in its application the type, frequency, and severity of the health problem that would be eliminated or reduced by the intended project. For example, can the problem be eliminated only by the project, or would routine maintenance be satisfactory? If basement flooding has occurred, was it storm water or sanitary flow? What complaints if any are recorded? In the case of underground improvements, how will they improve health if they are storm sewers? How would improved sanitary sewers improve health or reduce health risk? **In all cases, quantified documentation is required.** Mentioned problems, which are poorly documented, generally will not receive more than 5 points.

**Note:** Each project is looked at on an individual basis to determine if any aspects of this category apply. **Examples given above are NOT intended to be exclusive.**

4) Does the project help meet the infrastructure repair and replacement needs of the applying agency?

**Note:** Applying agency's priority listing (part of the Additional Support Information) must be filed with application(s).

- 25 - First priority project
- 20 - Second priority project
- 15 - Third priority project
- 10 - Fourth priority project
- 5 - Fifth priority project or lower

Appeal Score

\_\_\_\_\_

**Criterion 4 – Jurisdiction's Priority Listing**

The applying agency **must** submit a listing in priority order of the projects for which it is applying. Points will be awarded on the basis of most to least importance. The form is included in the Additional Support Information.

- 5) To what extent will a user fee funded agency be participating in the funding of the project?
- 10 - Less than 10%
  - 9 - 10% to 19.99%
  - 8 - 20% to 29.99%
  - 7 - 30% to 39.99%
  - 6 - 40% to 49.99%
  - 5 - 50% to 59.99%
  - 4 - 60% to 69.99%
  - 3 - 70% to 79.99%
  - 2 - 80% to 89.99%
  - 1 - 90% to 95%
  - 0 - Above 95%
- Appeal Score \_\_\_\_\_

**Criterion 5 – User Fee-funded Agency Participation**  
 To what extent will a user fee funded agency be participating in the funding of the project? (Example: rates for water or sewer, frontage assessments, etc.). The applying agency must submit documentation.

- 6) Economic Growth – How the completed project will enhance economic growth (See definitions).
- 10 – The project will directly secure new employment
  - 5 – The project will permit more development
  - 0 - The project will not impact development
- Appeal Score \_\_\_\_\_

**Criterion 6 – Economic Growth**  
 Will the completed project enhance economic growth and/or development ~~to the community?~~  
**Definitions:**  
**Secure new employment:** The project as designed will secure development/employers, which will immediately add new permanent employees ~~to the community.~~ The applying agency must submit details.  
**Permit more development:** The project as designed will permit additional business development/employment. The applying agency must supply details.  
**The project will not impact development:** The project will have no impact on business development.  
*Note:* Each project is looked at on an individual basis to determine if any aspects of this category apply.

- 7) Matching Funds - **LOCAL**
- 10 - This project is a loan or credit enhancement
  - 10 - 50% or higher
  - 8 - 40% to 49.99%
  - 6 - 30% to 39.99%
  - 4 - 20% to 29.99%
  - 2 - 10% to 19.99%
  - 0 - Less than 10%
- List total percentage of "Local" funds \_\_\_\_\_ %

**Criterion 7 – Matching Funds – Local**  
 The percentage of matching funds which come directly from the budget of the applying agency. Ten points shall be awarded if a loan request is at least 50% of the total project cost. (If the applying agency is not a user fee funded agency, any funds to be provided by a user fee generating agency will be considered "Matching Funds – Other").

8) Matching Funds – **OTHER** List total percentage of “Other” funds \_\_\_\_\_%

- 10 – 50% or higher
- 8 – 40% to 49.99%
- 6 – 30% to 39.99%
- 4 – 20% to 29.99%
- 2 – 10% to 19.99%
- 1 – 1% to 9.99%
- 0** – Less than 1%

List below each funding source and percentage

_____	_____ %
_____	_____ %
_____	_____ %
_____	_____ %
_____	_____ %

**Criterion 8 – Matching Funds - Other**

The percentage of matching funds that come from funding sources other than those mentioned in Criterion 7. A letter from the outside funding agency stating their financial participation in the project and the amount of funding is required to receive points. For MRF, a copy of the current application form filed with the Hamilton County Engineer’s Office meets the requirement.

9) Will the project alleviate serious capacity problems or hazards or respond to the future level of service needs of the district?

- 10 - Project design is for future demand.
- 8 - Project design is for partial future demand.
- 6 - Project design is for current demand.
- 4 - Project design is for minimal increase in capacity.
- 0** - Project design is for no increase in capacity.

Appeal Score

\_\_\_\_\_

**Criterion 9 – Alleviate Capacity Problems**

The applying agency shall provide a narrative, along with pertinent support documentation, which describe the existing deficiencies and showing how congestion will be reduced or eliminated and how service will be improved to meet the needs of any expected growth or development. A formal capacity analysis must accompany the application to receive more than 4 points. Projected traffic or demand should be calculated as follows:

**Formula:**

Existing volume x design year factor = projected volume

Design Year	Design year factor		
	Urban	Suburban	Rural
20	1.40	1.70	1.60
10	1.20	1.35	1.30

**Definitions:**

**Future demand** – Project will eliminate existing congestion or deficiencies and will provide sufficient capacity or service for twenty-year projected demand or fully developed area conditions. Justification must be supplied if the area is already largely developed or undevelopable and thus the projection factors used deviate from the above table.

**Partial future demand** – Project will eliminate existing congestion or deficiencies and will provide sufficient capacity or service for ten-year projected demand or partially developed area conditions. Justification must be supplied if the area is already largely developed or undevelopable and thus the projection factors used deviate from the above table.

**Current demand** – Project will eliminate existing congestion or deficiencies and will provide sufficient capacity or service only for existing demand and conditions.

**Minimal increase** – Project will reduce but not eliminate existing congestion or deficiencies and will provide a minimal but less than sufficient increase in existing capacity or service for existing demand and conditions.

**No increase** – Project will have no effect on existing congestion or deficiencies and provide no increase in capacity or service for existing demand and conditions.

10) Readiness to Proceed - If SCIP/LTIP funds are granted, when would the construction contract be awarded?

- 5 - Will be under contract by December 31, 2009 and no delinquent projects in Rounds 20 & 21
- 3 - Will be under contract by March 31, 2010 and/or one delinquent project in Rounds 20 & 21
- 0 - Will not be under contract by March 31, 2010 and/or more than one delinquent project in Rounds 20 & 21

**Criterion 10 – Readiness to Proceed**

The Support Staff will assign points based on engineering experience and status of design plans. A project is considered delinquent when it has not received a notice to proceed within the time stated on the original application and no time extension has been granted by the OPWC. An applying agency receiving approval for a project and subsequently canceling the same after the bid date on the application will receive zero (0) points under this round and the following round.

11) Does the infrastructure have regional impact? Consider origination and destination of traffic, functional classifications, size of service area, and number of jurisdictions served, etc.

10 – Major Impact

Appeal Score

8 – Significant Impact

6 – Moderate Impact

4 – Minor Impact

2 – Minimal or No Impact

**Criterion 11 - Regional Impact**

The regional significance of the infrastructure that is being repaired or replaced.

**Definitions:**

**Major Impact** – Roads: Major Arterial: A direct connector to an Interstate Highway; Arterials are intended to provide a greater degree of mobility rather than land access. Arterials generally convey large traffic volumes for distances greater than one mile. A major arterial is a highway that is of regional importance and is intended to serve beyond the county. It may connect urban centers with one another and/or with outlying communities and employment or shopping centers. A major arterial is intended primarily to serve through traffic.

**Significant Impact** – Roads: Minor Arterial: A roadway, also serving through traffic, that is similar in function to a major arterial, but operates with lower traffic volumes, serves trips of shorter distances (but still greater than one mile), and may provide a higher degree of property access than do major arterials.

**Moderate Impact** – Roads: Major Collector: A roadway that provides for traffic movement between local roads/streets and arterials or community-wide activity centers and carries moderate traffic volumes over moderate distances (generally less than one mile). Major collectors may also provide direct access to abutting properties, such as regional shopping centers, large industrial parks, major subdivisions and community-wide recreational facilities, but typically not individual residences. Most major collectors are also county roads and are therefore through streets.

**Minor Impact** – Roads: Minor Collector: A roadway similar in functions to a major collector but which carries lower traffic volumes over shorter distances and has a higher degree of property access. Minor collectors may serve as main circulation streets within large, residential neighborhoods. Most minor collectors are also township roads and streets and may, or may not, be through streets.

**Minimal or No Impact** – Roads: Local: A roadway that is primarily intended to provide access to abutting properties. It tends to accommodate lower traffic volumes, serves short trips (generally within neighborhoods), and provides connections preferably only to collector streets rather than arterials.

12) What is the overall economic health of the jurisdiction?

10 Points

8 Points

6 Points

4 Points

2 Points

**Criterion 12 – Economic Health**

The District 2 Integrating Committee predetermines the applying agency's economic health. The economic health of a jurisdiction may periodically be adjusted when census and other budgetary data are updated.

13) Has any formal action by a federal, state, or local government agency resulted in a partial or complete ban of the usage or expansion of the usage for the involved infrastructure?

10 - Complete ban, facility closed

Appeal Score

8 – 80% reduction in legal load or 4-wheeled vehicles only

7 – Moratorium on future development, *not* functioning for current demand

6 – 60% reduction in legal load

5 - Moratorium on future development, functioning for current demand

4 – 40% reduction in legal load

2 – 20% reduction in legal load

0 Less than 20% reduction in legal load

**Criterion 13 - Ban**

The applying agency shall provide documentation to show that a facility ban or moratorium has been formally placed. The ban or moratorium must have been caused by a structural or operational problem. Points will only be awarded if the end result of the project will cause the ban to be lifted.

14) What is the total number of existing daily users that will benefit as a result of the proposed project?

10 - 30,000 or more

Appeal Score

8 - 21,000 to 29,999

6 - 12,000 to 20,999

4 - 3,000 to 11,999

2 2,999 and under

**Criterion 14 - Users**

The applying agency shall provide documentation. A registered professional engineer or the applying agency's C.E.O must certify the appropriate documentation. Documentation may include current traffic counts, households served, when converted to a measurement of persons. Public transit users are permitted to be counted for the roads and bridges, but only when certifiable ridership figures are provided.

15) Has the applying agency enacted the optional \$5 license plate fee, an infrastructure levy, a user fee, or dedicated tax for the pertinent infrastructure? *(Provide documentation of which fees have been enacted.)*

5 - Two or more of the above

3 - One of the above

0 - None of the above

Appeal Score

*BOND DOESN'T COUNT*

**Criterion 15 – Fees, Levies, Etc.**

The applying agency shall document (in the "Additional Support Information" form) which type of fees, levies or taxes they have dedicated toward the type of infrastructure being applied for.